

5           **We claim:**

10           1. The method of dispensing liquid in a pipetting device comprising a housing with a holder to mount a pipette, whereas an air pump connected to the pipette, and a processor controlling the device operation is disposed in the housing, wherein after aspiration by the pump of liquid into the pipette, the required size of the liquid dose is dispensed from the pipette in proportion to the amount of atmospheric air supplied thereto through a valve or a set of valves connected to the pipette, characterised by that the amount of the supplied atmospheric air is programmed in the processor by  
15           determination of time and/or flow rate and/or damping of the supply of atmospheric air to the pipette.

          2. The method according to the claim 1 characterised by that the amount of air supplied to the pipette is determined basing on stored in the processor memory air flow function related to the type of liquid and/or pipette.

20           3. The method according to the claim 1 characterised by that the amount of air supplied to the pipette is determined basing on stored in the processor memory standard air flow tables related to the type of liquid and/or pipette.

          4. The method according to the claim 2 or 3 characterised by that data concerning air flow are input to the processor memory from an external appliance.

25           5. The method according to the claim 4 characterised by that the external appliance communicates with the pipetting device by wire or in wireless manner.

          6. The method according to the claim 4 characterised by that a programmable controller or a computer is applied as the external appliance.

7. The pipetting device comprising a housing with a pipette mounting holder, whereas an air pump connected to the pipette is disposed in the housing, characterised by that it includes at least one valve for controlled atmospheric air flow during liquid dispensing, whereas this valve is connected to the pipette (5).

5        8. The pipetting device comprising a housing with a pipette mounting holder, whereas an air pump connected to the pipette, and a processor controlling the operation of the device are disposed in the housing, characterised by that it includes a set of valves (10) for processor (15) controlled atmospheric air flow during liquid dispensing, whereas this set of valves (10) is connected to the pipette (5).

10       9. The device according to the claim 8 characterised by that the valve set (10) output is connected between the air flow distributor (8) connected to the air pump (6) and controlled by the liquid aspirating button (13) and the liquid dispensing button (14), and the pipette (5).

15       10. The device according to the claim 7 characterised by that it includes at least one air flow damper in the path of atmospheric air flow with the valve.

11. The device according to the claim 8 characterised by that it includes a set of air flow dampers (11) connected to the inlet of the set of valves (10).

20       12. The device according to the claim 8 characterised by that a programmed dispensing button (19) is connected to the processor (15) with the display (16) and function selection and function confirmation buttons (17, 18).

13. The device according to the claim 8 characterised by that the set of valves (10) is controlled by the processor (15).

14. The device according to the claim 10 or 11 characterised by that the air flow damper and/or the set of air flow dampers (11) is controlled by the processor (15).

25       15. The device according to the claim 13 or 14 characterised by that the processor (15) is controlled from an external appliance.

16. The device according to the claim 9 characterised by that it includes an air flow three-way pipe (9) which is connected between the air flow distributing valve (8), the pipette (5) and the outlet from the set of valves (10).

17. The device according to the claim 16 characterised by that it includes a manifold (12) which is connected between the output from the set of valves (10) and the air flow three-way pipe (9).

18. The device according to the claim 12 characterised by that the function of  
5 programmed dispensing button (19) is after programmed switching by the processor (15) taken over by the liquid aspiration button (13).

19. The device according to the claim 8 characterised by that the processor (15) includes stored in its memory air flow functions or standard air flow tables which take into account the type of used liquid and/or pipette.